



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Choi et al. Art Unit : 1616  
Serial No. : 10/053,535 Examiner : Frank I. Choi  
Filed : January 15, 2002  
Title : CARBON MONOXIDE AS A BIOMARKER AND THERAPEUTIC AGENT

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Commissioner for Patents  
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INFORMATION DISCLOSURE STATEMENT

Applicants request consideration of the references listed on the attached PTO-1449 form. Under 37 C.F.R. § 1.98 (a)(2)(ii), only copies of foreign patent documents and/or non-patent literature are enclosed. Copies of any listed U.S. patents or U.S. patent application publications can be provided upon request.

Applicants wish to draw the Examiner's attention to Zhou et al., Section of Respiratory System Foreign Medical Sciences 19:187-187 (1999), cited on the attached Form PTO-1449 as Document AMM. This reference was cited by a foreign patent office in a foreign counterpart application.

This filing is being made with the filing of a Request for Continued Examination. No fee is required.

Respectfully submitted,

Date: 2/10/06

  
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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 13681-003002	Application No. 10/053,535																																																																																																								
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<p style="text-align: center;"><b>U.S. Patent Documents</b></p> <table border="1"> <thead> <tr> <th>Examiner Initial</th> <th>Desig. ID</th> <th>Document Number</th> <th>Publication Date</th> <th>Patentee</th> <th>Class</th> <th>Subclass</th> <th>Filing Date If Appropriate</th> </tr> </thead> <tbody> <tr><td></td><td>AA</td><td>4,053,590</td><td>10/11/1977</td><td>Bonsen et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>AB</td><td>5,084,380</td><td>01/28/1992</td><td>Carney</td><td></td><td></td><td></td></tr> <tr><td></td><td>AC</td><td>5,664,563</td><td>09/09/1997</td><td>Schroeder et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>AD</td><td>5,731,326</td><td>03/24/1998</td><td>Hart et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>AE</td><td>5,914,316</td><td>06/22/1999</td><td>Brown et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>AF</td><td>6,069,132</td><td>05/30/2000</td><td>Revanker</td><td></td><td></td><td></td></tr> <tr><td></td><td>AG</td><td>US 2003/0009127 A1</td><td>01/09/2003</td><td>Trescony et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>AH</td><td>US 2003/0068387 A1</td><td>04/10/2003</td><td>Buelow et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>AI</td><td>US 2004/0067261 A1</td><td>04/08/2004</td><td>Haas et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>AJ</td><td>US 2004/0197271 A1</td><td>10/07/2004</td><td>Kunka et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>AK</td><td>US 2005/0048133 A1</td><td>03/03/2005</td><td>Pinsky et al.</td><td></td><td></td><td></td></tr> <tr><td></td><td>AL</td><td>US 2005/0250688 A1</td><td>11/10/2005</td><td>Pinsky et al.</td><td></td><td></td><td></td></tr> </tbody> </table>				Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate		AA	4,053,590	10/11/1977	Bonsen et al.					AB	5,084,380	01/28/1992	Carney					AC	5,664,563	09/09/1997	Schroeder et al.					AD	5,731,326	03/24/1998	Hart et al.					AE	5,914,316	06/22/1999	Brown et al.					AF	6,069,132	05/30/2000	Revanker					AG	US 2003/0009127 A1	01/09/2003	Trescony et al.					AH	US 2003/0068387 A1	04/10/2003	Buelow et al.					AI	US 2004/0067261 A1	04/08/2004	Haas et al.					AJ	US 2004/0197271 A1	10/07/2004	Kunka et al.					AK	US 2005/0048133 A1	03/03/2005	Pinsky et al.					AL	US 2005/0250688 A1	11/10/2005	Pinsky et al.			
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<b>Foreign Patent Documents or Published Foreign Patent Applications</b>							
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation
							Yes No
	AM	2 816 212	05/10/2002	France			X
	AN	WO 94/22482	10/13/1994	WIPO			
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	AP	WO 99/49880	10/07/1999	WIPO			
	AQ	WO 02/092075	11/21/2002	WIPO			

<b>Other Documents (include Author, Title, Date, and Place of Publication)</b>		
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	AR	“Carbon Monoxide Poisoning – Symptoms,” <a href="http://my.webmd.com/hw/home_health/aa7304.asp">http://my.webmd.com/hw/home_health/aa7304.asp</a> , 1 page, retrieved July 11, 2005
	AS	“Carbon Monoxide Poisoning – What Happens,” <a href="http://my.webmd.com/hw/home_health/aa7326.asp">http://my.webmd.com/hw/home_health/aa7326.asp</a> , 1 page, retrieved July 11, 2005
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	AU	Clayton et al., “Inhaled carbon monoxide and hyperoxic lung injury in rats,” Am. J. Physiol. Lung Cell Mol. Physiol. 281:L949-57 (2001)

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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(37 CFR 1.98(b))			

**Other Documents (include Author, Title, Date, and Place of Publication)**

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	AV	"Colorectal Cancer Treatment: an Overview," American Cancer Society, <a href="http://www.cancer.org">http://www.cancer.org</a> , 2 pages (2000)
	AW	Farrugia et al., "Heme oxygenase, carbon monoxide, and interstitial cells of Cajal," Microscopy Res. and Technique 47:321-324 (1999)
	AX	Fujita et al., "Paradoxical rescue from ischemic lung injury by inhaled carbon monoxide driven by derepression of fibrinolysis," Nature Medicine 7:598-604 (2001)
	AY	Huizinga, "Physiology and pathophysiology of the interstitial cell of Cajal: from bench to bedside. II. Gastric motility: lessons from mutant mice on slow waves and intervention," Am. J. Physiol. Gastrointest. Liver Physiol. 281:G1129-34 (2001)
	AZ	Kyokane et al., "Carbon Monoxide From Heme Catabolism Protects Against Hepatobiliary Dysfunction in Endotoxin-Treated Rat Liver," Gastroenterology 120:1227-40 (2001)
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	ABB	Libby et al., "Chronic Rejection - Review," Immunity, 14:387-397 (2001)
	ACC	Liu et al., "Carbon monoxide and nitric oxide suppress the hypoxic induction of vascular endothelial growth factor gene via the 5' enhancer," J. Biol. Chem. 273(24):15257-62 (1998).
	ADD	Miller et al., "Heme oxygenase 2 is present in interstitial cell networks of the mouse small intestine," Gastroenterology 114:239-244 (1998)
	AEE	Moore et al., "Inhaled Carbon Monoxide Suppresses the Development of Postoperative Ileus in the Murine Small Intestine," Gastroenterology, 124:377-391 (2003)
	AFF	Moore et al., "Pre-treatment with Low Concentration of Carbon Monoxide (250 to 75 ppm) for 3 hr prior to Laparotomy Protects Against Postoperative Ileus," Digestive Disease Week Abstracts and Itinerary Planner 2003: Abstract No. M1337 (2003)
	AGG	Nachar et al., "Low-Dose Inhaled Carbon Monoxide Reduces Pulmonary Vascular Resistance During Acute Hypoxemia in Adult Sheep," High Altitude Medicine & Biology 2:377-385 (2001)
	AHH	Nakao et al., "Immunomodulatory effects of inhaled carbon monoxide on rat syngeneic small bowel graft motility," Gut 52:1278-85 (2003)
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	AKK	Pannen et al., "Protective Role of Endogenous Carbon Monoxide in Hepatic Microcirculatory Dysfunction after Hemorrhagic Shock in Rats," J. Clin. Invest. 102:1220-1228 (1998)
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	AOO	Zuckerbraun et al., "Carbon Monoxide Protects against Liver Failure through Nitric Oxide-induced Heme Oxygenase 1," J. Exp. Med., 198(11):1707-1716 (2003)

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